Navy Biometrics Program Overview

Biometric Consortium Conference
24 September 2002

Dave Guerrino

DoD Biometrics Management Office

U.S. Navy SPAWAR Representative

david.guerrino@us.army.mil

(703) 602-5476

SPAWAR

BIOMETRICS
DEPARTMENT OF DEFENSE

Introduction

The Navy's Biometrics Program is centered around six focus

areas, all working together with the common goal to bring

biometrics to the operational Navy and Marine Corps Enterprise.

- Biometrics Management Office (BMO)

- Voice Biometrics

- Biometrics Assurance

- Tactical Integration

- Operational Implementations

- Test and Evaluation

Focus Area
Biometrics Management Office

- SPAWAR Assigned to Execute Biometrics Program in DoN
- Established Navy BMO Representation in August 2000
- Proponent for Navy Biometrics Interests within the BMO
  - Focal Point for Initiatives, Support, Information and Awareness
  - Respond to Requests for Biometrics Assistance
  - Support and Contribute to DoD, BMO and Industry Working Groups
  - Provide Input to BMO Strategy and Vision
  - Establish and Maintain Dialog with Navy Stakeholders
- Support Provided by BAH McLean
- POC: Dave Guerrino, SPAWAR, (703) 602-5476, david.guerrino@us.army.mil

Focus Area
Voice Biometrics

- Apply Voice Biometrics as a Means to Provide Reliable and User-Friendly Speaker Authentication for Use in Unique Situations
- Applications of Interest Include Remote Authentication; Nuclear, Biological and Chemical protective gear; and Logical Access Control
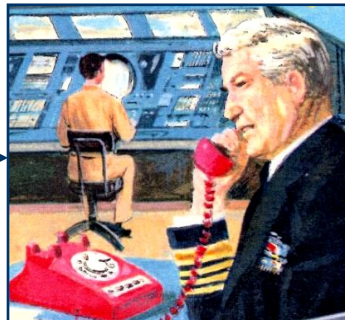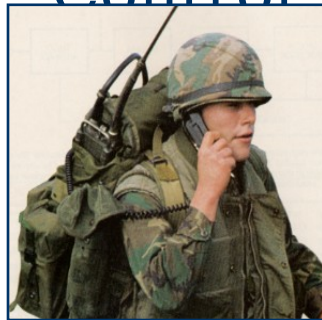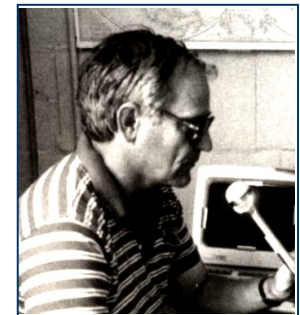
1. Remote Biometrics
The speaker and information source are not co-located

2. NBC Applications
Other biometrics cannot be used

3. Access Control
A fast (2 sec) and reliable method

Focus Area
Voice Biometrics (Continued)

- Application of COTS Voice Biometric Devices
  - Supplemented with Noise Canceling Preprocessors
  - Evaluated Against Military Noise Environments
  - Tested over ISDN Channels
  - Extend to Tactical Terminals Including SINCGARS and ANDVT
- Develop Voice Biometric Devices and Techniques for Unique Military Specific Applications
  - MOPP-4 Gear
- Evaluation of Prototype Devices in Fleet Environments Planned in Coming Months
- POC: George Kang, NRL 5555, (202) 767-2157, kang@itd.nrl.navy.mil

Focus Area
Biometrics Assurance

- Evaluate Security Issues related to Biometric Technologies and Establish Security Requirements for Development and Evaluation of Biometric Products for Navy Use
  - Type Accreditation Support for Specific Biometric Products
  - Assess Biometric System Risk for Navy Environments and Systems
- Provide Navy Security Engineering Support to the BMO
  - Co-Authored Biometric Protection Profile for Medium Robustness Environments
  - Coordinate with NIAP Protection Profile Review Board
- POC: Swati Shah, NRL 5541, (202) 404-4884, shah@itd.nrl.navy.mil

Focus Area
Tactical Integration

- Determine the Practical Benefits and Costs of Deploying Biometrics in the Fleet and Demonstrate Biometric Technology in a Navy Combat, Weapon or C3I System

- Systems Considered include Cooperative Engagement Capability (CEC), DD21/ACTD, Area Air Defense Commander (AADC), GCCS-M and Advanced Tomahawk Weapon Control System (ATWCS)

- ATWCS selected for Phase 2
  - Biometrically Enabled Consoles
- POC: Bruce Shank, JHU/APL (240) 228-6764 bruce.shank@jhuapl.edu

Focus Area
Operational Implementations

- Promote Shore-Based and Afloat Pilots at Navy and Marine Corps Activities to:
  - Introduce Biometrics to End Users
  - Measure End User Acceptance of Biometrics
  - Evaluate Performance of COTS Biometric Products
  - Develop Solutions that can be Applied Enterprise-Wide

- Recent Initiatives Include:
  - Evaluate Biometrically Enhanced Smart Cards
  - Quantify the Efficiencies and Benefits of Biometrics and Calculate the Associated Return on Investment (ROI)
  - Biometric Type Accreditation

- POC: Larry Taylor, SSC Charleston
  (843) 218-5413, taylorl@spawar.navy.mil

8

Navy Biometrics Pilots and Quick Looks

Project	Access	Users	Biometric	Status
Operational Commands				
USS CORONADO	Physical	100	Iris	Completed*
USS CORONADO	Logical	25	Fingerprint	Completed
Sub Base, San Diego	Physical	50	Hand	On Going
HMX-1	Physical	TBD	Fingerprint	FY 03
SOCOM	Physical	60	Iris	Completed*
JWAC	Logical	700	Fingerprint	On Going
JSOC	Physical	TBD	Fingerprint	FY 03
PACOM	Physical	TBD	Fingerprint	FY
Shore-Based Commands				
Consolidated Brig	Physical	60	Face, Hand, Iris, Fngprnt	Completed
DESC Web Portal	Logical	Lab	Fingerprint	Completed
DCMS	Logical	70	Fingerprint	Completed
MITNOC	Physical	100	Iris	Completed*
HQ USMC	Logical	25	Fingerprint	Completed
SPAWAR, Norfolk	Physical	160	Fingerprint	On

* Still Active

Focus Area
Test and Evaluation

- Promote Pilot Studies and Conduct Limited Test and Evaluation of Biometric Products to Determine Performance in Unique Navy Environments and to Build In-House Expertise

- Recent Initiatives Include
  - Evaluate Biometrically Enhanced Smart Cards
  - Investigate Biometric Solutions to Mitigate Internal Intrusion Threats within the Shipboard Community

- POC: Claudia Judge, SSC San Diego, (619) 553-6727 judgec@spawar.navy

10

Summary

- The Navy biometrics program is a coordinated effort focused on delivering a common enterprise-wide capability

- Biometrics as an enabling technology must be integrated into the entire security construct

- Much has been accomplished to raise the visibility of biometrics in the Navy and Marine Corps

- Bottom line: The promise of biometrics is on the horizon